UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,974	07/28/2003	John Schrag	1500.1084	4092

21171   7590   01/10/2008
STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER
AUGUSTINE, NICHOLAS

ART UNIT	PAPER NUMBER
2179	

MAIL DATE	DELIVERY MODE
01/10/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/627,974	SCHRAG ET AL.
	Examiner	Art Unit	
	Nicholas Augustine	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>04 October 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-15</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-15</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

A.   This action is in response to the following communications: Request for

Continued Examination filed: 10/04/2007.

B.   Claims 1-15 remains pending.

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the

fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since

this application is eligible for continued examination under 37 CFR 1.114, and the fee

set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office

action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

10/04/2007 has been entered.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
conditions and requirements of this title.

3.   Claims 1-8 and 14-15 rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter. Claims 1-8 and 14-15 are directed

to a program per se as they are directed to a graphical user interface (GUI) element

(claims 1-8 and 15) or GUI (claim 14), which as described in the specification is mere

software; a computer program (software) per se is not included in one of the statutory

categories of invention and from the current practices of the Office a claim directly

claiming to a computer program per se is believed to be non-statutory, more information

about this matter is covered in the Annex IV of the Interim Guidelines for Subject matter

Eligibility.

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   This application currently names joint inventors. In considering

patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the

subject matter of the various claims was commonly owned at the time any inventions

covered therein were made absent any evidence to the contrary. Applicant is advised

of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of

each claim that was not commonly owned at the time a later invention was made in

order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35

U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6.   Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Komerska et al. ("Haptic Task Constraints for 3D Interaction"), herein referred to as

"Komersaka", in view of Anderson, Hakan (US 6,801,217), herein referred to as

"Anderson".

As for independent claim 1, Komersaka teaches a graphical user interface element,

comprising: a three-dimensional orientation indicator widget positioned in associated a

three-dimensional scene and visually indicating an orientation of the scene (figure 3),

and said indicator comprising:

view direction controls (pitch and yaw) each indicating a direction of a corresponding

view into the three-dimensional scene (figure 3; wherein depicted show what direction

the screen orientation will be manipulated when the user clicks on the pitch or yaw view

controls) and causing a display view orientation of the three-dimensional scene to

change to the corresponding view when selected and where the view controls rotate

corresponding to the change in the display view orientation (figure 3 and 4; wherein

depicted is the actual rotation of the widget). In anticipation of amendment and to

advance prosecution Komerska does not specifically mention more than (yaw, pitch and

scale view controls), however in the same field of endeavor Anderson teaches 6

degrees of view controls (top, bottom and four sides; wherein the user can manipulate a

replication of a 3D model which is displayed in the scene with the actual 3D model to

use as a navigation tool to orient around the object by clicking with the mouse (col.3,

lines 59-97; col.4, lines 1-41 and col.5, lines 40-67; col.6, lines 1-59). It would have

been obvious to one of ordinary skill in the art at the time of the invention to combine

Anderson's six degrees of view controls of widget into Komerska three degrees of view

control widget for screen orientation, this is true because both Andersons method and

Komerska were well known principles of viewing 3D data which one of ordinary skill in

the art would combine to have predictable results of a widget having more than two view

controls.

As for dependent claim 2, Komerska teaches the graphical user interface element as

recited in claim 1, wherein an object in the scene is centered and sized to fit the display

view when a scene change occurs responsive to selection of one of the controls (figure

3 and 5).

As for dependent claim 3, Komerska teaches the graphical user interface element as

recited in claim 1, wherein the indicator is part of the three-dimensional scene, always

positioned at a predetermined position in the display view and always substantially a

same size in the display view (figure 3).

As for dependent claim 4, Komerska teaches the graphical user interface element as

recited in claim1, wherein the element comprises:

a central core control associated with a perspective view of the scene; and axial

controls peripherally positioned with respect to the core control, aligned with the axial

dimensions of the scene and associated with corresponding front, back, top, bottom, left

side and right side views (note the analysis of claim 1 above in view of Anderson's

widget design).

As for dependent claim 5, Komerska teaches the graphical user interface element is

recited in claim 4, wherein the front direction control is different from the other controls

(page 4, second column; also note the analysis of claim 1 above in view of Anderson's

widget design).

As for dependent claim 6, Komerska teaches the graphical user interface element as

recited in claim 4, wherein the axial controls are each shaped to point at the core control

indicating the view direction of the axial control. (figure 3, page 4, second column; also

note the analysis of claim 1 above in view of Anderson's widget design)

As for dependent claim 7, Komerska teaches the graphical user interface element as

recited in claim 4, further comprising a non-axial control peripherally positioned with

respect to the core control and indicating a direction of a corresponding view into the

three-dimensional scene and causing a display view of three-dimensional scene to

change to the corresponding view when selected (figure 3, page 4, second column; also

note the analysis of claim 1 above in view of Anderson's widget design).

As for dependent claim 8, Komerska teaches the graphical user interface element as

recited in claim 7, wherein the non-axial controls are specified by a user (figure 3, page

4,seond column and page 5, first column).

As for dependent claim 9, Komerska teaches a process, comprising:

determining whether a view direction indicating control of a-a three-dimensional

orientation indicator positioned in a display view of a three-dimensional scene has been

activated; and orienting the display view orientation to the view direction of the control

when the control is activated and wherein the view control rotates corresponding to the

change in the display view orientation (note the analysis of claim 1 above).

As for dependent claim 10, Komerska teaches a process as recited in claim 9, wherein

the indicator is in the three dimensional scene and the process further comprises:

positioning the indicator in the scene to place the indicator in a predetermined position

in the display view; and changing the size of the indicator in the scene to fix the

indicator at a predetermined size in the display view (figure 3,4 and 5; page 4, second

column).

As for dependent claim 11, Komerska teaches a process as recited in claim 9, further

comprising: centering a scene object in the display view; and fitting the scene object to

the display view (figure 3,4 and 5; page 4, second column).

As for independent claim 12, Komerska teaches a system, comprising:

display; an input device used to make selections on the display; and a computer

coupled to the mouse and the display, displaying a three-dimensional scene

on the display in a display view, the scene comprising a three-dimensional orientation

indicator positioned in and indicating the orientation of the scene, the orientation

indicator comprising view controls indicating a view direction and the computer

changing the display view orientation to the view direction associated with a control

selected by the mouse and where the view controls rotate corresponding to the change

in the display view orientation (note the analysis of claim 1 above).

As for independent claim 13, Komerska teaches a computer readable storage

controlling a computer by a process stored thereon determining whether a view

direction indicating control of a-ha three-dimensional orientation indicator positioned in a

display view of a three-dimensional scene has been activated and orienting the display

view orientation to the view direction of the control when the control is activated and

where the view control rotates corresponding to the change in the display view

orientation (page 1, first column; wherein discussed is the system being implemented

on a computer system; note the analysis of claim 1 above).

As for independent claim 14, Komerska teaches a graphical user interface having three-

dimensional directional indicators positioned in and indicating an orientation of a three-

dimensional scene and that orient the view to the direction indicated when activated by

a user and where the indicator rotates corresponding to the change in the view (note the analysis of claim 1 above).

As for dependent claim 15, Komerska teaches a graphical user interface element, comprising: a three-dimensional-n orientation indicator positioned in a three-dimensional scene, visually indicating an orientation of the scene, part of the three-dimensional scene, always positioned at a predetermined position in the display view and always substantially a same size in the display view, and said indicator comprising:

view direction controls each indicating a direction of a corresponding view into the three-dimensional scene and causing a display view orientation of three-dimensional scene to change to the corresponding view when selected and where the view controls rotate corresponding to the change in the display view orientation, the view direction controls comprising: a central core control associated with a perspective view of the scene and causing a display view of three-dimensional scene to change to the corresponding perspective view when selected; axial controls peripherally positioned with respect to the core control, aligned with the axial dimensions of the scene, associated with corresponding front, back, top, bottom, left side and right side views, shaped to point at the core control indicating the view direction of the axial control with the front view direction control being a different color than the other controls and the axial controls being labeled with axial labels comprising part of the controls; and

a non-axial control peripherally positioned with respect to the core control by a user and

indicating a direction of a corresponding view into the three- dimensional scene and

causing a display view of three-dimensional scene to change to the corresponding non-

axial view when selected, and wherein an object in the scene is centered and sized to

fit the display view when a scene change occurs responsive to selection of one of the

controls (note the analysis of claim 1 above; wherein the combination of Anderson into

Komerska teaches that of a widget with various indictors which when actuated upon

changes the orientation in such that is provided that the indicators are provided around

a three dimensional representation of the object being edited by the user such as to

give a clear indication to the user to where the orientation is to be changed in the

viewport.

(Note:) It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006,1009, 158 USPQ 275, 277 (CCPA 1968)).

Response to Arguments

Applicant's arguments with respect to claims 1-15 have been carefully

considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art cited is related to 3D controls for variation in a scene orientation.

Inquires

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Augustine whose telephone number is 571-270-1056. The examiner can normally be reached on Monday - Friday: 7:30- 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
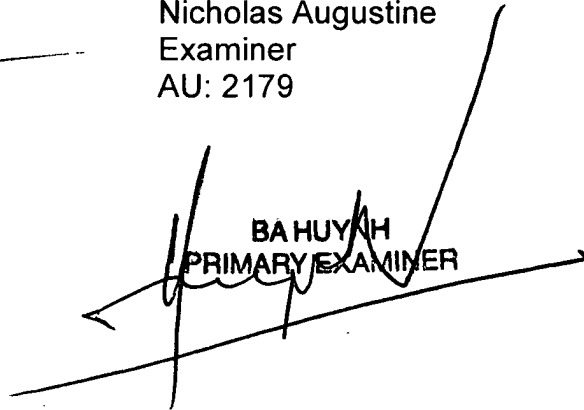
Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

N. Augustine
January 4, 2008

Nicholas Augustine
Examiner
AU: 2179

BA HUYNH
PRIMARY EXAMINER